

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	8	(v-ring) near2 cylinder	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 14:09
L2	5	(knife near2 edged) near3 (ring near3 cylinder)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 12:17
L3	56	clipping near2 punch	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 12:27
L4	15	((("4192414") or ("4203359") or ("4890475") or ("5054353") or ("5749279") or ("3802310"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/17 12:28
L5	11	("6408726" "5749279" "5673601" "5136521" "3802310").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 14:11
L6	5	("6408726" "5749279" "5673601" "5136521" "3802310").PN.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:15

L7	99	("4969344" "5868555" "5975858" "5651301" "4471304" "5516082" "4290577" "4293115" "4363261" "4363380" "4423748" "4463590" "4543812" "4549482" "4796453" "4874309" "4925115" "4954074" "5213031" "5390527" "5460708" "5472298" "5572902" "5647427" "5682786" "5799532" "5810119" "5829490" "6006578" "6068245" "6125681" "6135214" "6490904" "6821104" "4465441" "5651335" "4307693" "4768629" "4828337" "4960188" "5419242" "5553713" "5636561" "5651634" "5743362" "6024011" "6325192" "6405846" "6418894" "5477725").pn. ("5826504" "6370931" "5825108" "4248545" "4316379" "4326401" "4762329" "4925058" "5306325" "5423403" "5857375" "6240818" "4362037" "4471687" "4611483" "5009091" "5245900" "5526738" "5787926" "4064726" "4322960" "6718870" "4399472" "4425838" "4566372" "6010311" "4930330" "5482442" "5596864" "6189444" "4359930" "4394861" "4523639" "4861259" "5272902" "5313816" "5400499" "5411564" "5495834" "5626071" "5839353" "5954784" "5988608" "6224333" "6224333" "3627336" "3592106" "3704619" "3670557" "3636816").pn.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:16
L8	49	("5826504" "6370931" "5825108" "4248545" "4316379" "4326401" "4762329" "4925058" "5306325" "5423403" "5857375" "6240818" "4362037" "4471687" "4611483" "5009091" "5245900" "5526738" "5787926" "4064726" "4322960" "6718870" "4399472" "4425838" "4566372" "6010311" "4930330" "5482442" "5596864" "6189444" "4359930" "4394861" "4523639" "4861259" "5272902" "5313816" "5400499" "5411564" "5495834" "5626071" "5839353" "5954784" "5988608" "6224333" "6224333" "3627336" "3592106" "3704619" "3670557" "3636816").pn.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:16

L9	50	("4969344" "5868555" "5975858" "5651301" "4471304" "5516082" "4290577" "4293115" "4363261" "4363380" "4423748" "4463590" "4543812" "4549482" "4796453" "4874309" "4925115" "4954074" "5213031" "5390527" "5460708" "5472298" "5572902" "5647427" "5682786" "5799532" "5810119" "5829490" "6006578" "6068245" "6125681" "6135214" "6490904" "6821104" "4465441" "5651335" "4307693" "4768629" "4828337" "4960188" "5419242" "5553713" "5636561" "5651634" "5743362" "6024011" "6325192" "6405846" "6418894" "5477725").pn.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:16
S1	6	(v-ring or (v near2 ring)) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:53
S2	25	(v-ring or (v near2 ring)) near2 cylinder	USOCR	OR	ON	2004/06/27 19:42
S3	7079	tappet	USOCR	OR	ON	2004/06/27 19:42
S4	11735	tappet	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:42
S5	31	tappet and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:45
S6	4166	(ejector or ejecting) and (blanking or punch)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:48
S7	4	(v-ring) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 11:35
S8	21451	(v ring) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:53

S9	6	(v near2 ring) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:55
S10	744	compensation near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:05
S11	248	(hydraulic or hydraulically) near2 equilibrium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:57
S12	6	(compensation near2 cylinder) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:57
S13	1	((hydraulic or hydraulically) near2 equilibrium) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:58
S14	408	(83/639.1).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/27 21:03
S15	673702	(compensation near2 cylinder) or buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:05
S16	391	((compensation near2 cylinder) or buffer) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:06
S17	1	((((compensation near2 cylinder) or buffer) and "83"/\$.ccls.) and ((hydraulic or hydraulically) near2 equilibrium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:06
S18	0	"6408726".URPN.	USPAT	OR	ON	2004/06/27 20:09

S19	22	("1903234" "1908563" "2123683" "2182162" "2211864" "3029677" "3392613" "3640167" "3667305" "3739669" "3779122" "3802310" "4387583" "4672831" "4901427" "4979415" "5052208" "5077998" "5136521" "5295938" "5325755" "5662016").PN.	USPAT	OR	ON	2004/06/27 20:09
S20	9	"5673601".URPN.	USPAT	OR	ON	2004/06/27 20:16
S21	10	("3827328" "4116122" "4214496" "4633720" "4833884" "4945742" "5299478" "5345861" "5361615" "5390574").PN.	USPAT	OR	ON	2004/06/27 20:18
S22	14	"3570343".URPN.	USPAT	OR	ON	2004/06/27 20:32
S23	5	("1428174" "2579940" "3107567" "3111053" "3119292").PN.	USPAT	OR	ON	2004/06/27 20:34
S24	101	(83/639.5).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/27 21:14
S25	1468	((83/615) or (83/623) or (83/55) or (83/694)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/27 21:15
S26	1413	((83/615) or (83/623) or (83/55) or (83/694)).CCLS.) not (((83/639. 5).CCLS.) or ((83/639.1).CCLS.))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:38
S27	398	(83/685).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/28 07:38
S28	1916	((83/55) or (83/639.1) or (83/639. 5) or (83/694) or (83/615) or (83/623)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/28 07:38

S29	350	((83/685).CCLS.) not (((83/55) or (83/639.1) or (83/639.5) or (83/694) or (83/615) or (83/623)). CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:46
S30	54963	((equal or equalized) near2 (pressure or pressurized or pressurizing))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:47
S31	112	((equal or equalized) near2 (pressure or pressurized or pressurizing)) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:49
S32	31	((equal or equalized) near2 (pressure or pressurized or pressurizing)) and "83"/\$.ccls. and (punch or die)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:51
S33	30	((equal or equalized) near2 (pressure or pressurized or pressurizing)) and "83"/\$.ccls. and (punch or die)	USOCR	OR	ON	2004/06/28 07:51

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	8	(v-ring) near2 cylinder	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 14:09
L2	5	(knife near2 edged) near3 (ring near3 cylinder)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 12:17
L3	56	clipping near2 punch	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 12:27
L4	15	((("4192414") or ("4203359") or ("4890475") or ("5054353") or ("5749279") or ("3802310")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/17 12:28
L5	11	("6408726" "5749279" "5673601" "5136521" "3802310").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 14:11
L6	5	("6408726" "5749279" "5673601" "5136521" "3802310").PN.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:15

L7	99	("4969344" "5868555" "5975858" "5651301" "4471304" "5516082" "4290577" "4293115" "4363261" "4363380" "4423748" "4463590" "4543812" "4549482" "4796453" "4874309" "4925115" "4954074" "5213031" "5390527" "5460708" "5472298" "5572902" "5647427" "5682786" "5799532" "5810119" "5829490" "6006578" "6068245" "6125681" "6135214" "6490904" "6821104" "4465441" "5651335" "4307693" "4768629" "4828337" "4960188" "5419242" "5553713" "5636561" "5651634" "5743362" "6024011" "6325192" "6405846" "6418894" "5477725").pn. ("5826504" "6370931" "5825108" "4248545" "4316379" "4326401" "4762329" "4925058" "5306325" "5423403" "5857375" "6240818" "4362037" "4471687" "4611483" "5009091" "5245900" "5526738" "5787926" "4064726" "4322960" "6718870" "4399472" "4425838" "4566372" "6010311" "4930330" "5482442" "5596864" "6189444" "4359930" "4394861" "4523639" "4861259" "5272902" "5313816" "5400499" "5411564" "5495834" "5626071" "5839353" "5954784" "5988608" "6224333" "6224333" "3627336" "3592106" "3704619" "3670557" "3636816").pn.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:16
L8	49	("5826504" "6370931" "5825108" "4248545" "4316379" "4326401" "4762329" "4925058" "5306325" "5423403" "5857375" "6240818" "4362037" "4471687" "4611483" "5009091" "5245900" "5526738" "5787926" "4064726" "4322960" "6718870" "4399472" "4425838" "4566372" "6010311" "4930330" "5482442" "5596864" "6189444" "4359930" "4394861" "4523639" "4861259" "5272902" "5313816" "5400499" "5411564" "5495834" "5626071" "5839353" "5954784" "5988608" "6224333" "6224333" "3627336" "3592106" "3704619" "3670557" "3636816").pn.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:16

L9	50	("4969344" "5868555" "5975858" "5651301" "4471304" "5516082" "4290577" "4293115" "4363261" "4363380" "4423748" "4463590" "4543812" "4549482" "4796453" "4874309" "4925115" "4954074" "5213031" "5390527" "5460708" "5472298" "5572902" "5647427" "5682786" "5799532" "5810119" "5829490" "6006578" "6068245" "6125681" "6135214" "6490904" "6821104" "4465441" "5651335" "4307693" "4768629" "4828337" "4960188" "5419242" "5553713" "5636561" "5651634" "5743362" "6024011" "6325192" "6405846" "6418894" "5477725").pn.	US-PGPUB; USPAT	OR	ON	2005/02/17 15:16
S1	6	(v-ring or (v near2 ring)) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:53
S2	25	(v-ring or (v near2 ring)) near2 cylinder	USOCR	OR	ON	2004/06/27 19:42
S3	7079	tappet	USOCR	OR	ON	2004/06/27 19:42
S4	11735	tappet	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:42
S5	31	tappet and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:45
S6	4166	(ejector or ejecting) and (blanking or punch)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:48
S7	4	(v-ring) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/02/17 11:35
S8	21451	(v ring) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:53

S9	6	(v near2 ring) near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:55
S10	744	compensation near2 cylinder	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:05
S11	248	(hydraulic or hydraulically) near2 equilibrium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:57
S12	6	(compensation near2 cylinder) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:57
S13	1	((hydraulic or hydraulically) near2 equilibrium) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 19:58
S14	408	(83/639.1).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/27 21:03
S15	673702	(compensation near2 cylinder) or buffer	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:05
S16	391	((compensation near2 cylinder) or buffer) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:06
S17	1	((((compensation near2 cylinder) or buffer) and "83"/\$.ccls.) and ((hydraulic or hydraulically) near2 equilibrium)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/27 20:06
S18	0	"6408726".URPN.	USPAT	OR	ON	2004/06/27 20:09

S19	22	("1903234" "1908563" "2123683" "2182162" "2211864" "3029677" "3392613" "3640167" "3667305" "3739669" "3779122" "3802310" "4387583" "4672831" "4901427" "4979415" "5052208" "5077998" "5136521" "5295938" "5325755" "5662016").PN.	USPAT	OR	ON	2004/06/27 20:09
S20	9	"5673601".URPN.	USPAT	OR	ON	2004/06/27 20:16
S21	10	("3827328" "4116122" "4214496" "4633720" "4833884" "4945742" "5299478" "5345861" "5361615" "5390574").PN.	USPAT	OR	ON	2004/06/27 20:18
S22	14	"3570343".URPN.	USPAT	OR	ON	2004/06/27 20:32
S23	5	("1428174" "2579940" "3107567" "3111053" "3119292").PN.	USPAT	OR	ON	2004/06/27 20:34
S24	101	(83/639.5).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/27 21:14
S25	1468	((83/615) or (83/623) or (83/55) or (83/694)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/27 21:15
S26	1413	((((83/615) or (83/623) or (83/55) or (83/694)).CCLS.) not (((83/639. 5).CCLS.) or ((83/639.1).CCLS.))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:38
S27	398	(83/685).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/28 07:38
S28	1916	((83/55) or (83/639.1) or (83/639. 5) or (83/694) or (83/615) or (83/623)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/06/28 07:38

S29	350	((83/685).CCLS.) not (((83/55) or (83/639.1) or (83/639.5) or (83/694) or (83/615) or (83/623)). CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:46
S30	54963	(equal or equalized) near2 (pressure or pressurized or pressurizing)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:47
S31	112	((equal or equalized) near2 (pressure or pressurized or pressurizing)) and "83"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:49
S32	31	((equal or equalized) near2 (pressure or pressurized or pressurizing)) and "83"/\$.ccls. and (punch or die)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/06/28 07:51
S33	30	((equal or equalized) near2 (pressure or pressurized or pressurizing)) and "83"/\$.ccls. and (punch or die)	USOCR	OR	ON	2004/06/28 07:51

09

PLUS Search Results for S/N 10018609, Searched February 17, 2005

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

4969344	5826504
5868555	6370931
5975858	5825108
5651301	4248545
4471304	4316379
5516082	4326401
4290577	4762329
4293115	4925058
4363261	5306325
4363380	5423403
4423748	5857375
4463590	6240818
4543812	4362037
4549482	4471687
4796453	4611483
4874309	5009091
4925115	5245900
4954074	5526738
5213031	5787926
5390527	4064726
5460708	4322960
5472298	6718870
5572902	4399472
5647427	4425838
5682786	4566372
5799532	6010311
5810119	4930330
5829490	5482442
6006578	5596864
6068245	6189444
6125681	4359930
6135214	4394861
6490904	4523639
6821104	4861259
4465441	5272902

10018609_LIST.txt

5651335	5313816
4307693	5400499
4768629	5411564
4828337	5495834
4960188	5626071
5419242	5839353
5553713	5954784
5636561	5988608
5651634	6224333
5743362	6224333
6024011	3627336
6325192	3592106
6405846	3704619
6418894	3670557
5477725	3636816

10018609_QUAL.txt

4969344 53
5868555 50
5975858 50
5651301 49
4471304 49
5516082 49
4290577 49
4293115 49
4363261 49
4363380 49
4423748 49
4463590 49
4543812 49
4549482 49
4796453 49
4874309 49
4925115 49
4954074 49
5213031 49
5390527 49
5460708 49
5472298 49
5572902 49
5647427 49
5682786 49
5799532 49
5810119 49
5829490 49
6006578 49
6068245 49
6125681 49
6135214 49
6490904 49
6821104 49
4465441 49
5651335 49
4307693 49
4768629 49
4828337 49
4960188 49
5419242 49
5553713 49
5636561 49
5651634 49
5743362 49
6024011 49
6325192 49
6405846 49

10018609_QUAL.txt

6418894 49
5477725 48
5826504 46
6370931 46
5825108 43
4248545 43
4316379 43
4326401 43
4762329 43
4925058 43
5306325 43
5423403 43
5857375 43
6240818 43
4362037 42
4471687 42
4611483 42
5009091 42
5245900 42
5526738 42
5787926 42
4064726 42
4322960 42
6718870 42
4399472 41
4425838 41
4566372 41
6010311 41
4930330 41
5482442 41
5596864 41
6189444 41
4359930 41
4394861 41
4523639 41
4861259 41
5272902 41
5313816 41
5400499 41
5411564 41
5495834 41
5626071 41
5839353 41
5954784 41
5988608 41
6224333 41
6224333 41
3627336 41

10018609_QUAL.txt

3592106 41
3704619 41
3670557 41
3636816 41

10018609 CLS.txt
Most Frequently Occurring Classifications of Patents Returned
From A Search of 10018609 on February 17, 2005

Original Classifications

4 72/348
2 72/351
2 72/355.4
2 72/402
2 123/90.16
2 192/70.25
2 251/1.3
2 415/158
2 417/222.1

Cross-Reference Classifications

3 72/347
3 72/453.13
3 92/24
3 417/273
3 425/590
2 29/889.1
2 29/889.2
2 60/443
2 60/602
2 72/21.1
2 72/344
2 72/377
2 72/427
2 72/446
2 72/462
2 72/481.1
2 83/639.1
2 91/497
2 92/122
2 92/168
2 92/17
2 92/5R
2 92/85B
2 100/259
2 100/269.14
2 267/119
2 425/451.9
2 425/595

Combined Classifications

4 72/347
4 72/348

10018609_CLS.txt

3 72/446
3 72/453.13
3 92/168
3 92/24
3 251/1.3
3 417/273
3 425/590
2 29/889.1
2 29/889.2
2 60/443
2 60/602
2 72/21.1
2 72/344
2 72/350
2 72/351
2 72/355.4
2 72/377
2 72/402
2 72/427
2 72/462
2 72/481.1
2 83/137
2 83/639.1
2 91/497
2 92/122
2 92/13.8
2 92/17
2 92/5R
2 92/85B
2 100/259
2 100/269.14
2 123/90.16
2 192/70.25
2 267/119
2 415/158
2 417/219
2 417/222.1
2 425/150
2 425/451.2
2 425/451.9
2 425/595

Titles of Most Frequently Occurring Classifications of Patents Returned

From A Search of 10018609 on February 17, 2005

- 4 72/347 (1 OR, 3 XR)
 Class 072 : METAL DEFORMING
 72/343 BY USE OF CLOSED-DIE AND COACTING WORK-FORCER
 (E.G., PUSH-DRAWING)
 72/347 .Cup or shell drawing (i.e., deep drawing)
- 4 72/348 (4 OR, 0 XR)
 Class 072 : METAL DEFORMING
 72/343 BY USE OF CLOSED-DIE AND COACTING WORK-FORCER
 (E.G., PUSH-DRAWING)
 72/347 .Cup or shell drawing (i.e., deep drawing)
 72/348 ..With additional metal-deforming
- 3 72/446 (1 OR, 2 XR)
 Class 072 : METAL DEFORMING
 72/429 WITH MEANS TO DRIVE TOOL
 72/446 .With means to permit tool positioning
- 3 72/453.13 (0 OR, 3 XR)
 Class 072 : METAL DEFORMING
 72/429 WITH MEANS TO DRIVE TOOL
 72/453.01 .Including pneumatic- or fluid-actuated tool
 support
 72/453.13 ..Including fluid cushion for die opposite to
 ram
- 3 92/168 (1 OR, 2 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/165R WITH GUIDE OR SEAL ON CYLINDER END PORTION FOR
 PISTON OR MEMBER MOVED BY PISTON
 92/168 .Non-metallic seal means between piston or
 member and end portion
- 3 92/24 (0 OR, 3 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/15 WITH RELEASABLE STOP OR LATCH MEANS TO PREVENT
 MOVEMENT OF WORKING MEMBER
 92/23 .Means includes element interfitting between
 working member and fixed part
 92/24 ..Element actuated or retained in operative
 position by relatively movable fluid respon

sive member

3 251/1.3 (2 OR, 1 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/1.1 BLOW-OUT PREVENTERS (I.E., COOPERATING SEGMENT
 S OF ANNULUS)
 251/1.3 .Radial reciprocating ram

3 417/273 (0 OR, 3 XR)
 Class 417 : PUMPS
 417/269 THREE OR MORE CYLINDERS ARRANGED IN PARALLEL,
 Y TRANSMISSION RADIAL, OR CONICAL RELATIONSHIP WITH ROTAR
 AXIS
 417/273 .Radial cylinders

3 425/590 (0 OR, 3 XR)
 Class 425 : PLASTIC ARTICLE OR EARTHENWARE SHAPING OR
 TREATING: APPARATUS
 425/542 FEMALE MOLD AND CHARGER TO SUPPLY FLUENT STOCK
 UNDER PRESSURE THERETO IN FLUID-TIGHT REL
 ATIONSHIP (E.G.,
 INJECTION MOLD, ETC.)
 425/589 .With means to close mold
 425/590 ..Varying pressure and/or speed closing

2 29/889.1 (0 OR, 2 XR)
 Class 029 : METAL WORKING
 29/592 METHOD OF MECHANICAL MANUFACTURE
 29/889 .Impeller making
 29/889.1 ..Repairing or disassembling

2 29/889.2 (0 OR, 2 XR)
 Class 029 : METAL WORKING
 29/592 METHOD OF MECHANICAL MANUFACTURE
 29/889 .Impeller making
 29/889.2 ..Turbomachine making

2 60/443 (0 OR, 2 XR)
 Class 060 : POWER PLANTS
 60/325 PRESSURE FLUID SOURCE AND MOTOR
 60/443 .Servo-motor having externally operated contro
 1 valve sets motor or pump displacement

2 60/602 (0 OR, 2 XR)
 Class 060 : POWER PLANTS
 60/597 FLUID MOTOR MEANS DRIVEN BY WASTE HEAT OR BY
 EXHAUST ENERGY FROM INTERNAL COMBUSTION E

ENGINE

60/598 .With supercharging means for engine
 60/602 ..Having condition responsive valve controllin

g

engine exhaust flow

2 72/21.1 (0 OR, 2 XR)

Class 072 : METAL DEFORMING

72/6.1 WITH USE OF CONTROL MEANS ENERGIZED IN RESPONS

E

TO ACTIVATOR STIMULATED BY CONDITION SENS

OR

72/20.1 .Sensing tool or tool-linked part

72/21.1 ..Including plural sensors or sensor responsiv

e

to plural conditions

2 72/344 (0 OR, 2 XR)

Class 072 : METAL DEFORMING

72/343 BY USE OF CLOSED-DIE AND COACTING WORK-FORCER
(E.G., PUSH-DRAWING)

72/344 .With stripping or ejecting from tool

2 72/350 (1 OR, 1 XR)

Class 072 : METAL DEFORMING

72/343 BY USE OF CLOSED-DIE AND COACTING WORK-FORCER
(E.G., PUSH-DRAWING)

72/347 .Cup or shell drawing (i.e., deep drawing)

72/350 ..With application of frictional restraining
force to work during deformation

2 72/351 (2 OR, 0 XR)

Class 072 : METAL DEFORMING

72/343 BY USE OF CLOSED-DIE AND COACTING WORK-FORCER
(E.G., PUSH-DRAWING)

72/347 .Cup or shell drawing (i.e., deep drawing)

72/350 ..With application of frictional restraining
force to work during deformation72/351 ...With yieldable actuation of work-gripper
(e.g., spring-biased blank-holder)

2 72/355.4 (2 OR, 0 XR)

Class 072 : METAL DEFORMING

72/343 BY USE OF CLOSED-DIE AND COACTING WORK-FORCER
(E.G., PUSH-DRAWING)72/352 .Forcing work into or within closed die; e.g.,
forging

72/353.2 ..By two or more coacting tools movable

10018609_CLSTITLES.txt

relative to closed die; e.g., tool compl

ex

- 72/354.6 ...One tool telescoping into closed die
- 72/355.2Coaxial opposed tools
- 72/355.4Passing through work; e.g., punch

- 2 72/377 (0 OR, 2 XR)
 - Class 072 : METAL DEFORMING
 - 72/362 PROCESS
 - 72/377 .With attenuation, thickening; elongating or shortening of work material

- 2 72/402 (2 OR, 0 XR)
 - Class 072 : METAL DEFORMING
 - 72/394 BY THREE OR MORE COACTING RELATIVELY MOVABLE TOOLS (I.E., TOOL-COMPLEX)
 - 72/399 .Concurrently actuated tools
 - 72/402 ..All tools movable radially inward

- 2 72/427 (0 OR, 2 XR)
 - Class 072 : METAL DEFORMING
 - 72/419 WITH MEANS TO HANDLE WORK OR PRODUCT
 - 72/426 .Including product handling means
 - 72/427 ..Ejector

- 2 72/462 (0 OR, 2 XR)
 - Class 072 : METAL DEFORMING
 - 72/462 TOOL AND/OR TOOL HOLDER

- 2 72/481.1 (0 OR, 2 XR)
 - Class 072 : METAL DEFORMING
 - 72/462 TOOL AND/OR TOOL HOLDER
 - 72/476 .Having unitary tool-face
 - 72/481.1 ..With support or holder for adjustable or removable tool face

- 2 83/137 (1 OR, 1 XR)
 - Class 083 : CUTTING
 - 83/78 WITH PRODUCT HANDLING MEANS
 - 83/109 .Means to move, guide, or permit free fall or flight of product
 - 83/111 ..Means to move product out of contact with tool
 - 83/129 ...Moving stripper timed with tool stroke
 - 83/136Carried by moving tool element or its support
 - 83/137Fluid pressure actuated stripper

2 83/639.1 (0 OR, 2 XR)
 Class 083 : CUTTING
 83/523 MEANS TO DRIVE OR TO GUIDE TOOL
 83/613 .With simple rectilinear reciprocating motion
 only
 83/639.1 ..Fluid pressure actuated

2 91/497 (0 OR, 2 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/472 THREE OR MORE CYLINDERS ARRANGED IN PARALLEL
 RADIAL OR CONICAL RELATIONSHIP WITH ROTAR
 Y TRANSMISSION
 AXIS
 91/491 .Radially disposed cylinders
 91/497 ..Stroke control

2 92/122 (0 OR, 2 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/120 OSCILLATING WORKING MEMBER OR CYLINDER THEREFO
 R
 92/121 .Oscillatory shaft with radially extending van
 e
 92/122 ..Plural angularly related vanes

2 92/13.8 (1 OR, 1 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/12.1 DISPLACEMENT CONTROL OF PLURAL CYLINDERS
 ARRANGED IN PARALLEL, RADIAL, OR CONICAL R
 ELATIONSHIP WITH
 ROTARY TRANSMISSION AXIS
 92/13.8 .Adjustment means includes external axially
 extending threaded piston stem

2 92/17 (0 OR, 2 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/15 WITH RELEASABLE STOP OR LATCH MEANS TO PREVENT
 MOVEMENT OF WORKING MEMBER
 92/17 .Engages member coaxial with and rotatable
 relative to working member

2 92/5R (0 OR, 2 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/5R WITH (1) SIGNAL OR INDICATOR OR (2) INSPECTION
 WINDOW IN EXPANSIBLE CHAMBER WALL PORTION

2 92/85B (0 OR, 2 XR)

10018609 CLSTITLES.txt

Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/85R WITH CUSHIONING MEANS EFFECTIVE OVER A PORTION
 ONLY OF STROKE
 92/85B .Fluid spring

2 100/259 (0 OR, 2 XR)
 Class 100 : PRESSES
 100/214 RECIPROCATING PRESS CONSTRUCTION
 100/259 .With plunger return cushioning

2 100/269.14 (0 OR, 2 XR)
 Class 100 : PRESSES
 100/214 RECIPROCATING PRESS CONSTRUCTION
 100/269.01 .Fluid pressure actuation
 100/269.14 ..Fluid supply system detail

2 123/90.16 (2 OR, 0 XR)
 Class 123 : INTERNAL-COMBUSTION ENGINES
 123/90.1 POPPET VALVE OPERATING MECHANISM
 123/90.15 .With means for varying timing
 123/90.16 ..Cam-to-valve relationship

2 192/70.25 (2 OR, 0 XR)
 Class 192 : CLUTCHES AND POWER-STOP CONTROL
 192/30R CLUTCHES
 192/66.1 .Axially engaging
 192/70.11 ..Interposed, mating clutch-elements
 192/70.25 ...With adjustable means to move clutch-elemen
 t
 axially (e.g., to compensate for wear)

2 267/119 (0 OR, 2 XR)
 Class 267 : SPRING DEVICES
 267/113 FLUID
 267/118 .Expansible-contractible chamber device
 267/119 ..Press cushion

2 415/158 (2 OR, 0 XR)
 Class 415 : ROTARY KINETIC FLUID MOTORS OR PUMPS
 415/148 SELECTIVELY ADJUSTABLE VANE OR WORKING FLUID
 CONTROL MEANS
 415/151 .Upstream of runner
 415/157 ..Single, axially movable cylinder or plate
 415/158 ...Movable to position surrounding blade

2 417/219 (1 OR, 1 XR)
 Class 417 : PUMPS
 417/212 CONDITION RESPONSIVE CONTROL OF DRIVE

10018609_CLSTITLES.txt

TRANSMISSION OR PUMP DISPLACEMENT

417/218 .Adjustable cam or linkage

417/219 ..Radially adjustable stator

2 417/222.1 (2 OR, 0 XR)

Class 417 : PUMPS

417/212 CONDITION RESPONSIVE CONTROL OF DRIVE
TRANSMISSION OR PUMP DISPLACEMENT

417/218 .Adjustable cam or linkage

417/222.1 ..Axial cam

2 425/150 (1 OR, 1 XR)

Class 425 : PLASTIC ARTICLE OR EARTHENWARE SHAPING OR
TREATING: APPARATUS

425/135 CONTROL MEANS RESPONSIVE TO OR ACTUATED BY
MEANS SENSING OR DETECTING A CONDITION OR

MATERIAL

TRIGGERED

425/150 .Mold motion or position control

2 425/451.2 (1 OR, 1 XR)

Class 425 : PLASTIC ARTICLE OR EARTHENWARE SHAPING OR
TREATING: APPARATUS

425/450.1 MOLD OPENING AND CLOSING MEANS AND SEGMENTED
FEMALE MOLD

425/451.2 .Varying pressure and/or speed closing

2 425/451.9 (0 OR, 2 XR)

Class 425 : PLASTIC ARTICLE OR EARTHENWARE SHAPING OR
TREATING: APPARATUS

425/451.9 SEGMENTED FEMALE MOLD AND MOLD CLAMPING MEANS

2 425/595 (0 OR, 2 XR)

Class 425 : PLASTIC ARTICLE OR EARTHENWARE SHAPING OR
TREATING: APPARATUS

425/542 FEMALE MOLD AND CHARGER TO SUPPLY FLUENT STOCK
UNDER PRESSURE THERETO IN FLUID-TIGHT RELA

TIONSHIP (E.G.,

INJECTION MOLD, ETC.)

425/595 .With means to lock mold in closed position

above 3
absorbed 2
accelerated 1
according 2
achieved 1
actual 1
added 1
addition 1
additional 3
advantages 1
after 1
ag 2
against 7
also 5
although 1
an 17
and 56
another 3
any 4
apart 1
apparatus 11
applying 1
appropriate 2
are 15
area 7
areas 1
arranged 6
arrow 1
as 14
assembly 2
assigned 4
associated 1
at 9
base 1
be 15
becomes 1
been 3
being 7
below 2
between 8
betweep 1
blanking 20
blankipg 1
book 1
both 1
bottom 2
briefly 2
by 11

can 6
capacity 1
case 4
chara 2
character 1
characterized 5
circuits 1
claim 4
claimed 7
claims 4
clamped 2
clipping 1
closed 1
column 5
compensated 2
compensation 22
compensayion 1
complicated 1
comprises 1
comprising 3
configuration 1
connected 12
connecting 1
connection 7
considerably 1
consisting 1
construction 4
conventional 1
cording 1
corresponding 2
corresponds 1
counter 1
counterforce 3
counterholder 20
coupled 1
course 2
crospie 1
cross 9
crosshead 8
crosspiece 3
cut 6
cutting 3
cyli 1
cylinder 46
cylinders 10
de 1
depending 1
derls 1

described 4
 description 1
 designed 1
 detail 4
 details 1
 device 3
 die 16
 different 1
 difficult 1
 direction 1
 dirqction 1
 dispensed 1
 distribute 1
 distribution 1
 double 1
 drawing 1
 drawn 2
 due 1
 during 5
 each 4
 ed 1
 edged 3
 edition 2
 effect 1
 effected 1
 effective 7
 egrated 1
 eject 1
 ejected 1
 ejector 5
 elements 1
 emanate 1
 embodiment 3
 en 1
 energy 2
 enough 1
 entire 1
 equal 3
 equilibrium 2
 essentially 1
 example 2
 exchange 2
 exemplar 1
 exemplary 1
 exert 1
 expenditure 1
 expensive 1
 fact 1

favorable 1
 fb 1
 fea 1
 feintool 2
 fewer 1
 figure 1
 fine 7
 finely 2
 finevblanking 1
 firmly 4
 follow 1
 follows 1
 for 16
 force 9
 forces 2
 found 1
 four 3
 fr 1
 frame 4
 from 13
 further 2
 furthermore 1
 generally 1
 gives 2
 greater 1
 guided 9
 handbuch 2
 has 12
 have 2
 he 1
 heavy 1
 height 1
 here 1
 holder 1
 housing 1
 however 2
 hydraulic 5
 hydraulically 4
 hydraulics 1
 identified 2
 improved 1
 in 53
 inserted 2
 inside 1
 integrated 1
 intended 1
 into 3
 invent 1

invention 6
is 60
it 4
kept 1
knife 3
known 1
large 3
latter 2
least 7
likewise 1
line 2
located 1
logic 5
lyss 2
machine 10
made 1
main 5
maintaining 1
manner 1
manual 1
mass 2
material 5
may 2
means 4
mentioned 2
metal 8
mkterial 1
mode 1
more 6
motion 2
moved 1
movement 1
moves 1
moving 1
mpensation 1
ms 1
nd 2
necessary 4
neutralized 1
no 3
not 5
nullified 1
object 2
of 53
oil 5
on 9
once 1
one 11

only 1
opened 2
opens 1
operated 1
operating 1
operation 1
opposes 2
opposite 2
or 9
out 5
outside 1
over 1
page 11
pages 2
paratus 1
part 3
passes 1
patent 1
per 1
pillars 1
piston 20
pistonls 1
pistons 5
pistonts 1
place 3
placed 1
plate 29
plates 1
plurality 1
position 2
possibilities 1
possible 2
pparatus 1
praxis 2
preferably 1
preferred 1
present 3
press 16
pressed 1
presses 3
pressing 2
pressure 9
pressures 1
principle 1
probably 1
problem 1
process 2
produced 2

proposes 1
prove 1
provide 1
provided 2
publisher 2
punch 12
quantity 2
quickly 1
raised 1
ram 22
rams 1
rapid 2
reasons 2
redu 1
reduces 1
reference 2
relates 1
relative 2
required 1
requires 1
respect 1
result 1
ring 37
rip 1
rod 5
rs 1
said 2
sake 1
same 3
saving 1
section 1
sectional 8
separate 1
serve 1
sh 1
she 1
sheet 7
should 1
shown 3
side 1
simple 1
simpler 1
simplest 1
simplicity 1
simplified 1
since 1
single 1
smaller 2

so 8
solid 1
solve 1
spaces 1
strength 1
stroke 8
subjected 2
substantially 5
such 2
sufficient 1
supply 1
supported 5
supporting 2
synchronism 1
take 1
taking 1
tank 6
tappet 2
terized 2
th 1
than 1
that 25
the 196
their 1
then 1
these 1
they 1
this 16
through 3
thus 2
tnd 1
to 43
together 1
tool 7
top 3
toward 1
traveling 1
turn 3
two 4
type 1
ufeinschneiden 1
under 2
up 2
upward 1
ures 1
urther 1
usually 2
valve 6

10018609_WDS.txt

various 2
very 3
via 16
walls 1
way 5
wct 1
weight 1
when 1
whereby 1
which 28
will 1
with 11
work 1
working 4
workpiece 11
workpieces 5
would 1
ws 1
yfeinschneidene 1
zed 1
znxvvro 1